UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 November 2010</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-3,9-12,14-16,19-22,26-28 and 31-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3,9-12,14-16,19-22,26-28 and 31-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>01 November 2010</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This action is in response to an amendment filed on 11/1/10.

Claims 1-3, 9-12, 14-16, 19-22, 26-28 and 31-33 are pending in this application.

Response to Arguments

Drawings

The amendments to the drawings are sufficient to overcome the previous objections

which are consequently withdrawn.

35 USC § 112 2nd rejections

The amendments to claim 3 and cancelation of claims 4-8 are sufficient to overcome the

previous 35 USC 112 2nd rejections, which are consequently withdrawn. However the

amendments raised new clarity issues which are discussed below.

35 USC § 103(a) over US 2003/0121032 to Cho et al. (Cho) in view of US

2002/0099837 to Oe et al. (Oe).

In the 2nd full par. on pg. 10, the applicants state:

> However, Cho appears to disclose that if a second processor receives an interrupt
> signal from a first processor in a first unit, the second processor starts a
> download/setup program stored in a second memory, and when the download/setup
> program is executed, the household device accesses a gateway, receives update
> function data and updates a first memory with the update function data. See, e.g.,
> Cho at ¶¶ 0074-0075. That is, Cho fails to teach or suggest "a first storage unit in
> which at least one protected program has been installed [but where] an upgrade file
> corresponding to the protected program [is stored in a] second storage unit..." as
> recited in independent claim 1. Nor does it teach or suggest "a first storage unit in
> which at least one protected program has been installed [and] steps of... deciding

whether a second storage unit ... stores an upgrade file corresponding to the protected program" as recited in independent claims 9 and 14.

The examiner respectfully disagrees. First it is noted that while the applicants have summarized, at least aspects of, Cho's disclosure and asserted that, at least based on this summary, Cho does not disclose particular claim limitations, the applicants have failed to indicate why the disclosure of Cho, and in particular the cited passages, should be understood to describe a patentably distinct scope from what is claimed. Accordingly, the applicants' arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Further, as indicated in the rejection, Cho appears to disclose the claimed functionality. Specifically Cho discloses "a first storage unit in which at least one protected program has been installed" (see e.g. par. [0062] "a first memory 323 for storing function data or program to be executed") but where "an upgrade file corresponding to the protected program [is stored in a] second storage unit" (see e.g. par. [0057] "update function data stored in the second storage unit 302"). Cho also discloses a step of "deciding whether a second storage unit ... stores an upgrade file corresponding to the protected program" (see e.g. par. [0057] "The management server 300 searches the first storage unit 301 for a household device 320 that needs to be updated with update function data stored in the second storage unit 302").

Thus, on its face, Cho appears to disclose the claimed functionality and the

applicants have not provided any reason why the claims should be considered

patentably distinct over this disclosure. Accordingly, the rejection is maintained.

35 USC § 103(a) over US 2003/0121032 to Cho et al. (Cho) in view of US

2002/0099837 to Oe et al. (Oe) in view of US 6,684,397 to Byer et al. (Byer).

In the first full par. on pg. 12, the applicants state:

> However, as stated above, Cho appears to disclose that if a second processor
> receives an interrupt signal from a first processor in a first unit, the second processor
> starts a download/setup program stored in a second memory, and when the
> download/setup program is executed, the household device accesses a gateway,
> receives update function data and updates a first memory with the update function
> data. See, e.g., Cho at ¶¶ 0074-0075. In other words, Cho fails to teach or suggest
> the control means for making the protected program upgraded when the received
> upgrade data corresponds to the protected program and transmitting the upgrade file
> to the sub-device when the received upgrade data does not correspond to the
> protected program. Furthermore, Cho fails to teach or suggest a method for making
> the protected program upgraded when the received upgrade data corresponds to the
> protected program and transmitting the upgrade file to the sub-device when the
> received upgrade data does not correspond to the protected program.

The examiner respectfully disagrees. Again the applicants have only juxtaposed

a summary of Cho's disclosure with the claim language, and have not indicated why

these should be considered to describe patently distinct scopes. Accordingly the

applicants' arguments fail to comply with 37 CFR 1.111(b) because they amount to a

general allegation that the claims define a patentable invention without specifically

pointing out how the language of the claims patentably distinguishes them from the

references. Further, it is noted that claim limitations directed to "transmitting the upgrade

file to the sub-device" are addressed with the combined teachings of Cho and Byer.

One cannot show nonobviousness by attacking references individually where the

rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413,

208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed.

Cir. 1986).

Further the references appear to teach the claimed limitations. Specifically, Cho

discloses "control means for making the protected program upgraded when the received

upgrade data corresponds to the protected program" (see e.g. par. [0073] "the

household device 320 updates an existing function with the received update function

data"). Both Cho and Byer disclose determining which devices have corresponding

upgrades (see e.g. Cho par. [0057] "The management server 300 searches the first

storage unit 301 for a household device 320 that needs the be updated with update

function data stored in the second storage unit 302"; Byer col. 10, lines 4-15 "The

master 58 may query this first configuration data 66 and establish which slaves 60 are

to have new software 76 remotely installed thereon"). Thus when it is determined that

an upgrade corresponds to the protected function running on the non-sub-device it

would have been obvious to rely on Cho's teachings to "make the protected program

upgraded" (e.g. par. [0073] "the household device 320 updates an existing function with

the received update function data"); and when it is determined that an upgrade

corresponds to one of Byer's slave devices, and thus not the protected program running

on the non-sub-device, it would have been obvious to rely on Byer's teachings to

transmit the upgrade file to the appropriate sub-device (e.g. col. 7, lines 57-62 "copy the

new software 76 from the first storage device 16a to the second storage device 16b").

Thus, on its face, the combination of Cho and Byer appears to make obvious the

claimed functionality and the applicants have not provided any reason why the claims

should be considered patentably distinct over this disclosure. Accordingly, the rejection

is maintained.

In the last full par. on pg. 12, the applicants state:

> Byer fails to cure the deficiencies of Cho and Oe. Byer appears to disclose that a
> master may direct a slave to copy new software from a first storage device to a
> second storage device. That is, Byer fails to teach or suggest a control means, or a
> method, for upgrading the protected program when the received upgrade data
> corresponds to the protected program and transmitting the upgrade data to the sub-
> device when the received upgrade data does not correspond to the protected
> program.

The examiner respectfully disagrees. Again the applicants have failed to

specifically point out how the language of the claims patentably distinguishes them from

the references and have addressed there assertions to the Byer reference alone where

the rejection was based on the combination of Cho and Byer. Accordingly, for the

reasons discussed above, the rejection is maintained.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 9-12, 14-16, 19-22, 26-28 and 31-33 are rejected under 35 U.S.C. 112,

second paragraph, as being indefinite for failing to particularly point out and

distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "... deciding whether a second storage unit ... stores an upgrade file corresponding to the protected program, and upgrading the protected program by using the upgrade file when the second storage unit stores the upgrade file corresponding to the protected program". The word "when" makes this limitation unclear. Specifically, the limitation could be read it two ways:

1) "upgrading ... when [it is determined that] the second storage unit stores the upgrade file corresponding to the protected program";

2) "upgrading ... [at the time that the] the second storage unit stores the upgrade file corresponding to the protected program".

Accordingly, the claim language fails to particularly point and distinction claim the intended subject matter. For the purposes of this examination the former understanding will be used.

Claims 2-3 depend from claim 1 and are likewise rejected.

Claims 9-12, 14-16, 19-22, 26-28 and 31-33 include similar language and are rejected accordingly.

Claim 19 recites "the at least one sub-device" in the 4th paragraph. There is insufficient antecedent basis for this limitation in the claim. Further claim 19 also recites "a second storage unit" in the 5th paragraph. It is not clear if this is intended to be a reference to "second storage unit" recited in the 3rd paragraph or to another "second storage unit"

Claims 20-22 depend from claim 19 and are likewise rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 9-12 and 14-16 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US 2003/0121032 to Cho at al. (Cho) in view of US

2002/0099837 to Oe et al. (Oe).

Regarding Claims 1, 9 and 14: Cho discloses an upgrade apparatus for a network

system which is installed in the network system (e.g. Fig. 3) having a first storage unit in

which at least one program has been installed (par. [0062] "a first memory 323 for

storing function data or program to be executed"), and which comprises

an upgrade means for deciding whether a second storage unit separated from

the first storage unit stores an upgrade file corresponding to the program (par. [0057]

"The update function data stored in the second storage unit 302 … The management

server 300 searches the first storage unit 301 for a household device 320 that needs the

be updated with update function data stored in the second storage unit 302"), and

upgrading the program by using the upgrade file when the second storage unit

stores the upgrade file corresponding to the protected program (par. [0057] "transmits

an update command and the update function data to the household device 320"; par.

[0073] "the household device 320 updates an existing function with the received update function data").

Cho does not disclose that that program being upgraded is a protected program.

Oe teaches a protected program (par. [0009] "method of controlling access to computer resource(s) ... such as a file ... storage device").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to protect Cho's programs (par. [0062] "function data or program to be executed") using Oe's methods (par. [0009] "controlling access to computer resource(s) ... such as a file"). Those of ordinary skill in the art would have been motivated to do so in order to "restrict operations to resources ... by a user who has no access right" (Oe par. [0007]).

Regarding Claims 2, 10 and 15: The rejections of claims 1, 9 and 14 are incorporated; further Cho and Oe teach a first storage unit protecting program (Oe par. [0009] "method of controlling access to computer resource(s) ... such as a file ... storage device") is installed (Oe par. [0445] "The protecting program ... can be installed or loaded to ... storage") in the first storage unit (par. [0062] "a first memory 323), and it would further be obvious to upgrade the protected program after the first storage unit protecting program is executed. Otherwise, unauthorized changes might be made.

Regarding Claim 3: The rejection of claim 1 is incorporated; further Cho discloses:

a connection means for communication with an external server (e.g. Fig. 3,

Home Gateway 310); and

a control means for transmitting upgrade information for the protected program

stored in the first storage unit to the external server through the connection means (par.

[0025] "provide household device information to the download manager"; par. [0026]

"the gateway searches the server ... for the household device based on the household

device information"), and

receiving upgrade data containing a new upgrade file and upgrade information

for the protected program from the external server (par. [0073] "transmits the update

function data to the household device 320").

Regarding Claims 11 and 16: The rejections of claims 9 and 14 are incorporated;

further Cho discloses the control means stores the upgrade data in the second storage

unit (par. [0062] "a second memory 324 for storing a download/setup program").

Regarding Claim 12: The rejection of claim 11 is incorporated; further Cho discloses

the upgrade means reads the upgrade file from the second storage unit, and upgrades

the protected program (par. [0073] "the household device 320 updates an existing

function with the received update function data").

Claims 19-22, 26-28 and 31-33 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US 2003/0121032 to Cho at al. (Cho) in view of US

2002/0099837 to Oe et al. (Oe) in view of US 6,684,397 to Byer et al. (Byer).

Regarding Claims 19, 26 and 31: Cho discloses an upgrade apparatus for a network

system comprising:

a first storage unit in which at least one program has been installed (par. [0062]

"a first memory 323 for storing function data or program to be executed"),

a second storage unit which is separated from the first storage unit and stores

upgrade data including upgrade information and an upgrade file corresponding to the

protected program (par. [0057] "The update function data stored in the second storage

unit 302"), comprising:

a connection means connected to an external server (Fig. 3, Home Gateway

310), for transmitting upgrade information stored in a second storage unit (Fig. 3,

Second Memory 302);

a control means for transmitting upgrade information stored in a second storage

unit to the external server through the connection means (par. [0069] "(g), the

household device 320 transmits the household device information ... to the gateway

310"; par. [0071] the management server 300 determines whether the household device

320 needs a version update based on the household device information that it holds"),

receiving a new upgrade data from the external server, storing the new upgrade

information and making the protected program upgraded when the received upgrade

data corresponds to the protected program (par. [0057] "transmits an update command and the update function data to the household device 320"; par. [0073] "the household device 320 updates an existing function with the received update function data"), storing the upgrade file in the second storage unit (par. [0062] "a second memory 324 for storing a download/setup program"); and

an upgrade means for upgrading the program corresponding to the received upgrade data according to the control of the control means (par. [0073] "the household device 320 updates an existing function with the received update function data").

Cho does not disclose that that program being upgraded is a protected program.

Oe teaches a protected program (par. [0009] "method of controlling access to computer resource(s) ... such as a file ... storage device").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to protect Cho's programs (par. [0062] "function data or program to be executed") using Oe's methods (par. [0009] "controlling access to computer resource(s) ... such as a file"). Those of ordinary skill in the art would have been motivated to do so in order to "restrict operations to resources ... by a user who has no access right" (Oe par. [0007]).

Cho and Oe do not teach deciding whether the upgrade file relates to the sub-device or program, and transmitting the upgrade file to the sub-device when the received upgrade data does not correspond to the protected program.

Byer teaches transmitting an upgrade file to a sub-device when the received upgrade data does not correspond to the protected program (col. 7, lines 57-62 "The master 58 may direct the slave 60 to copy the new software 76 from the first storage device 16a to the second storage device 16b"; col. 10, lines 4-15 "The master 58 may query this first configuration data 66 and establish which slaves 60 are to have new software 76 remotely installed thereon"; this determines that the upgrade data corresponds to a program on the sub-device and thus not to a 'protected program' on the master and thus meets the language of the claim).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to task Cho's device (Cho par. [0073] "the household device 320") with updating any appropriate slave devices (Byer col. 10, lines 4-9 "establish which slaves 60 are to have new software 76 remotely installed thereon"). Those of ordinary skill in the art would have been motivated to do so as an efficient means of updating the devices in the system (Cho par. [0008] "household devices 111, which are connected to one another through a related art bus having a predetermined standard"; Byer col. 2, lines 37-44 "Organizational logical trees … can greatly increase the performance of the network").

Regarding Claims 20, 27 and 32: The rejection of claims 19, 26 and 31 are

incorporated; further Cho and Byer teaches the upgrade information relates to the sub-

device (Byer col. 10, lines 4-9 "establish which slaves 60 are to have new software 76

remotely installed thereon") and the protected program (Cho par. [0073] "the household

device 320 updates an existing function with the received update function data").

Regarding Claims 21, 28 and 33: The rejections of claim 19, 26 and 31 are

incorporated; further Cho and Oe teach a first storage unit protecting program (Oe par.

[0009] "method of controlling access to computer resource(s) ... such as a file ... storage

device") is installed (Oe par. [0445] "The protecting program ... can be installed or

loaded to ... storage") in the first storage unit (par. [0062] "a first memory 323), and it

would further be obvious to upgrade the protected program after the first storage unit

protecting program is executed. Otherwise, unauthorized changes might be made.

Regarding Claim 22: The rejection of claim 21 is incorporated, wherein the upgrade

means upgrades the protected program by using the upgrade file (par. [0064] "If the

second processor 325 receives the interrupt signal … starts the download/setup

program stored in the second memory 324"), after the first storage unit protecting

program is executed (see the rejection of claims 21, 28 and 33) and before the

connection means is connected to the external server (par. [0064] "when the

download/setup program is executed, the household device 320 accesses the gateway

310").

Regarding Claims 35: The rejections of claims 31 are incorporated; further Cho

discloses the control means deletes the data in the first memory (par. [0075] "overwrites

a function program, which has been stored in the first memory 323") but Cho and Oe do

not explicitly teach the control means deletes the upgrade information previously stored

in the second storage unit.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to delete the upgrade information previously stored in the second storage

unit (par. [0062] "a second memory 324 for storing a download/setup program"), when

that upgrade information is replaced with new upgrade information (par. [0073] "the

received update function data"). Those of ordinary skill in the art would have been

motivated to do so to conserve space.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JASON MITCHELL whose telephone number is

(571)272-3728. The examiner can normally be reached on Monday-Thursday and

alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bullock Lewis can be reached on (571) 272-3759. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Mitchell/
Primary Examiner, Art Unit 2193